

IN THE CLAIMS:

1. (Canceled)

2. (Canceled)

3. (Currently Amended) A splitting router suitable for use in an autonomous system communication network that employs Open Shortest Path First protocol for communicating information, the splitting router comprising:

a topological database;

an Open Shortest Path First processing unit for updating the topological database in response to link state messages;

a splitting router packet processing unit for processing messages received over a link that connects the first splitting router and a second splitting router, and forwarding to the Open Shortest Path First processing unit hello messages received over the link that connects the first splitting router and the second splitting router;

a router packet processing unit for processing messages received over a sub-area network to which the splitting router is connected that is ~~not a backbone~~ a sub-area of a backbone network, and forwarding to the Open Shortest Path First processing unit hello messages received over the sub-area network to which the splitting router is connected; and

a buffer for buffering messages output by the splitting router packet processing unit and the router packet processing unit.

4. (Currently Amended) The splitting router of claim 3, [4] further comprising:
a splitting router output queue for receiving messages from the buffer and queuing messages received from the buffer in preparation for sending messages received from the buffer over the link connecting the first splitting router and the second splitting router;
and

a router output queue for receiving messages from the buffer and queuing messages received from the buffer in preparation for sending messages received from the buffer over the sub-area network to which the splitting router is connected.

5. (Currently Amended) A routing method suitable for an autonomous system communication network that employs Open Shortest Path First protocol for communicating information, comprising the act of configuring at least one metric in a topological database to allow passage of link state messages on a link between a first splitting router connected to a first sub-area network and a second splitting router connected to a second sub-area network and to substantially block from passage on the link between the first splitting router and the second splitting router messages that are not link state messages, wherein the metric comprises a measure of round-trip delay experienced by a ping message, and further wherein the measure of round-trip delay is purposefully increased above the delay actually experienced when the ping message is exchanged between the first splitting router and the second splitting router.

6. (Original) The method of claim 5, wherein the metric comprises a specification of bandwidth on the link between the first splitting router and the second splitting router.

7. (Original) The method of claim 5, wherein the act of configuring is responsive to filtering based on Type of Service.

8. (Canceled)

9. (Original) The method of claim 5, wherein the metric comprises a measure of round-trip delay experienced by a ping message, and further wherein the round-trip delay experienced by the ping message is purposefully increased by buffering the ping message for a predetermined time when the ping message is exchanged between the first splitting router and the second splitting router.